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Copyright GenCore version (c) 1993 - 2004 5.1.6 Compugen Ltd.

OM protein protein search, using sw model

October 13, 2004, 14:34:12 ; Search time 193 Seconds (without alignments) 193.779 Million cell updates/sec

Run on:

Title: Perfect score: Sequence: US-10-272-121-2 357 1 MRIHYLLFALLFLFLVPVPG... ...LPKEEQIGKCSTRGRKCCRR 65

BLOSUM62 Gapop 10.0 , Gapext 0.5

Scoring table:

Searched: 1825181 segs, 575374646 residues

Total number of DB DB seq length: 0
seq length: 2000000000 hits satisfying chosen parameters:

1825181

Minimum Maximum

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt\_02:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

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# **ALIGNMENTS**

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4 T C C C C C C C C C C C C C C C C C C	NCE FROM N.A., AND CHARACTERIZATION.  NE=21558153; PubMed=11702237; DOI=10.1007.  Go-Garcia JR., Jaumann F., Schulz S., Kr.  guez-Jimenez J., Forssmann U., Adermann K.  meier C., Becker D., Hedrich R., Forssmann  tification of a novel, multifunctional be  sin 3) with specific antimicrobial activi  na membranes of Xenopus cocytes and the in  battraction.";  Tissue Res. 306:257-264(2001).  SNCE FROM N.A.  1.P., Schutte B.C., Schudy A., Linzmeier R  son G.K., Tack B.F., Mitros J.P., Rosentha  ay P.B. Jr.;  covery of new human defensins using a geno  263:211-218(2001).  ENCE FROM N.A.  ENCE FROM N.A.	ryota; Metalia; Euthalia; Euthella; Euthella; Euthella; ENCE FROM CTION, AND UB=Keratin INE=211019 er J., Barlation and inducibliol. Chem.	HUMAN  PRT; 67 AA.  PR1534; Q8NFG6; Q9NPF6;  16-OCT-2001 (Rel. 40, Created)  16-OCT-2001 (Rel. 40, Last sequence update)  01-OCT-2004 (Rel. 45, Last annotation update)  Beta-defensin 103A precursor (Beta-defensin 3) (DEFB (HBD3) (Defensin like protein).  Name=DEFB103A; Synonyms=DEFB103, DEFB3, BD3;  Homo sapiens (Human).

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SEQUENCE FROM N.A.

TISSUE=Tonsil;

Chen S., He F., Li R.;

Chen S., He
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EMBL; AF295370; AAG02237.1;

EMBL; AF217245; AAF73853.1;

EMBL; AB037972; BAB40572.1;

EMBL; AF301470; AAG22030.1;

EMBL; AF516673; AAM62424.1;

PDB; 1KJ6; NMR; A=23-66.

Genew; HGNC:15967; DEFB103A.

MIM; 606611; -.

GO; GO:0006965; P:anti-Gram-

InterPro; IPR001855; Defensin

Pfam; PF00711; Defensin beta

3D-structure; Antibiotic; Di

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29-MAR-2004 (Rel. 43, C: 29-MAR-2004 (Rel. 44, L: 05-JUL-2004 (Rel. 44, L: 05-JUL-2004 (Rel. 44, L: Beta-defensin 103A precient).

Name=DEFB103A; Synonyms: Pan troglodytes (Chimpai Eukaryota; Metazoa; Chomamalia; Eutheria; Pril NCBI_TaxID=9598;

[1]

SEQUENCE FROM N.A.

TISSUE=Skin;
Duits L.A., Langermans vervenne R.A.W., Hiemst:
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GO; GO: 001
GO; GO: 001
InterPro;
Pfam; PFO1
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SEQUENCE-
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Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.
-!- MISCELLANEOUS: The sequence shown here is derived fr
EMBL/GenBank/DDBJ third party annotation (TPA) entry
EMBL; BK000557; DAA01350.1; -.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0006952; P:defense response; IEA.
GO; GO:0009613; P:response to pest/pathogen/parasite; IE
InterPro; IPR001855; Defensin_beta.
Pfam; PF00711; Defensin_beta; 1.
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            Langermans J.A.M.,
A.W., Hiemstra P.S.,
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-!- SIMILARITY: Belongs to the beta-defensin family.

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CHILA
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-!- FUNCTION: Exhibits antimicrobial activity against Gram and Gram-negative bacteria (By similarity).
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the beta-defensin family.
SUBCELLULAR LOCATION: TISSUE SPECIFICITY: H. mucosa and skin, and lung and trachea.
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RESULT AAR887 ID 7 AC 7

75 9 AAR81 AAR81 02-M

PRELIMINARY;

(TrEMBLrel.

27,

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188759 188759; 1MAR-2004

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RESULT 5
Q6SC68
ID Q6SC68;
AC Q6SC68;
DT 05-JUL-2004 (TrEMBLrel. 27, Cr
DT 05-JUL-2004 (TrEMBLrel. 27, La
DT 05-JUL-2004 (TrEMBLrel. 27, La
DT 05-JUL-2004 (TrEMBLrel. 27, La
DE Prepro-beta-defensin 3.
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata;
OC Mammalia; Eutheria; Cetartioda
OX NCBI_TaxID=9823;
RN [1]
RP SEQUENCE FROM N.A.
RA Sang Y., Zhang G., Ross C.R.,
RA Sang Y., Zhang G., Ross C.R.,
RL Submitted (NOV-2003) to the EM
EMBL; AY460575; AAR88759.1; -.
SQ SEQUENCE 67 AA; 7790 MW; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its cuse by non-profit institutions as long as its content is in no way conditied and this statement is not removed. Usage by and for commercial continues requires a license agreement (See http://www.isb-sib.ch/announce/corsend an email to license@isb-sib.ch).

CC crsend an email to license@isb-sib.ch).

CR EMBL; AY128668; AAM97293.1; -

EMBL; AY128668; AAM97293.1; -

EMBL; AY128668; DEFSN; 1.

SMART; SM00048; DEFSN; 1.

FT CHAIN 1 22 Potential.

FT CHAIN 23 67 Beta-defensin 1.

FT CHAIN 23 67 Beta-defensin 1.

FT CHAIN 23 62 By similarity.

FT DISULFID 45 63 By similarity.

FT DISULFID 45 63 By similarity.

SQUENCE 67 AA; 7676 MW; 30A611CDCCD5BA8D CRC64;

SQUENCE 67 AA; 7676 MW; 30A611CDCCD5BA8D CRC64;
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Last sequence update)
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EMBL/GenBank/DDBJ databases
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Pred. No. 1.7e-27;
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Sus scrofa (Pig).

Eukaryota; Metazoa; Chordata; Craniata; Vertebra Mammalia; Eutheria; Cetartiodactyla; Suina; Suid NCBI_TaxID=9823;

[1]

SEQUENCE FROM N.A.

Sang Y., Zhang G., Ross C.R., Blecha F.;

"Characterization of porcine beta-defensin 3 and porcine beta-defensin 1, 2 and 3.";

Submitted (NOV-2003) to the EMBL/GenBank/DDBJ da EMBL; AY460575; AAR88759.1; -.

SEQUENCE 67 AA; 7790 MW; 6BC28264846572AC CR
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Matches 44
                                                                                                                                          SEQUENCE FROM N.A.
STRAIN=C5781/6;
Maxwell A.;
Submitted (JUL-2003) to the EMBL/GenI[2]
SEQUENCE FROM N.A.
STRAIN=C5781/6;
Dorin J.R.;
Submitted (JUL-2003) to the EMBL/GenIEMBL; AJ578468; CAE17665.2; -.
GO; GO:00069576; C:extracellular; IEAGO; GO:0006952; P:defense response; GO; GO:0009613; P:response to pest/pinterPro; IPR001855; Defensin_beta.
Pfam; PF00711; Defensin_beta; 1.
SEQUENCE 67 AA; 7718 MW; EEFF0D9
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Q7TNV9;
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01-OCT-2004 (TrEMBLre
01-MAR-2004 (TrEMBLre
01-MAR-2004 (TrEMBLre
Beta defensin 14.
Name=Defb14;
Nus musculus (Mouse)
Eukaryota; Metazoa; (
Mammalia; Eutheria; N
NCBI_TaxID=10090;
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BD02_PANTR
ID BD02_PANTR
STANDARD; PRT; 64 AA.

DB02_PANTR
AC Q9TTI2;
AC Q9TTI2;
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 29-MAR-2004 (Rel. 44, Last sequence update)
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 29-MAR-2004 (Rel. 44, Last sequence update)
DT 29-MAR-2004 (Rel. 43, Last sequence update)
DT 29-MAR-2004 (Rel. 44, Last sequence update)
DT 29-MAR-204 (Rel. 44, Last sequence update)
DT 29-MAR-2004 (Rel. 44, Last sequence update)
DT 29-MAR-2004 (Rel. 44, Last sequence update)
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T 01-JUN-2003 (TrEMBLrel. 24, Created)
T 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
T 01-JUN-2003 (TrEMBLrel. 26, Last annotation update)
T 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
E Beta-defensin-1.
E Equus caballus (Horse).
S Equus caballus (Horse).
S Equus caballus (Horse).
C Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
NCBI_TaxID=9796;
IN [1]
SEQUENCE FROM N.A.
SANGY Y. Davis E.G., Blecha F.;
SAUBMITTED (OCT-2002) to the EMBL/GenBank/DDBJ databases.
SEQUENCE (AV170305; AAO32801.1; -...)
R CO; GO:0006576; C:extracellular; IEA.
RGO; GO:0006576; C:extracellular; IEA.
RGO; GO:0009613; P:response to pest/pathogen/parasite; IEA.
RGO; GO:0009613; P:response to pest/pathogen/parasite; IEA.
RR GO; GO:0009613; P:response to pest/pathogen/parasite; IEA.
RR SMART; SM00048; DEFSN; 1.
RR SMART; SM00048; DEFSN; 1.
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                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                     EMBL; AF288286; AAK26259.1; HSSP; O15263; 1FD3.
InterPro; IPR001855; Defensin InterPro; IPR006080; Defensin Pfam; PF00711; Defensin beta; SMART; SM00048; DEFSN; 1.
Antibiotic; Signal.
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MBL; AF071216; AAC69554.1; -.
DB; 1E4Q; NMR; A=28-64.
DB; 1FD3; X-ray; A/B/C/D=24-DB; 1FQQ; NMR; A=24-64.
enew; HGNC:2767; DEFB4.
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O; GO:0006935; P:Chemotaxis;
O; GO:0006955; P:immune respo; GO:0006955; P:immune respo; GO:0009613; P:response tonterPro; IPR001855; Defensin beta; D-structure; Antibiotic; Signature
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FUNCTION: Has antibacterial act
SUBCELLULAR LOCATION: Secreted.
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p:G-protein coupled receptor protein

p:response; TAS.

p:response to pest/pathogen/parasite

001855; Defensin_beta.

Defensin_beta; 1.

Antibiotic; Signal.

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16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Beta-defensin 3 precursor (BD-3) (mBD-3).
Name=Defb3; Synonyms=Bd3;
Name=Defb3; Synonyms=Bd3;
Mine musculus (Mouse).

Mine musculus (Mouse).
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Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Tones G. T. Marra M B.
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SUE=PCR rescued clones;
LINE=22388257; PubMed=12477932;
LINE=22388257; PubMed=12477932;
ausberg R.L., Feingold E.A., Grouse L.H., Derge ausberg R.L., Feingold E.A., Grouse L.H., Schaefer C.N
SUE SPECIFICITY.
AIN=C57BL/6, 129/SvJ, and FVB;
LINE=20517883; PubMed=10922379;
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                                                                                                                                                                                                                                                             musculus (Mouse).
aryota; Metazoa; Chordata;
malia; Eutheria; Rodentia;
I_TaxID=10090;
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neration and initial analysis of more than
mouse cDNA sequences.";
c. Natl. Acad. Sci. U.S.A. 99:16899-16903(2
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                                                                               beta-defensin 3 is an inducible epithelia of multiple organs."; Immun. 67:3542-3547(1999).
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E Enteric beta-defensin
Name=EBD;
Bos taurus (Bovine).
Eukaryota; Metazoa; C
Mammalia; Eutheria; C
Bovinae; Bos.
NCBI_TaxID=9913;
[1]
SEQUENCE FROM N.A.
MEDLINE=98147718; Puby
Tarver A.P., Clark D.P
Erdjument-Bromage "
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EMBL; AF093245; AAD29573.1; -.

EMBL; AF092929; AAD29572.1; -.

HSSP; O15263; 1E4Q.

MGD; MGI:1351612; Defb3:
InterPro; IPR001855; Defensin_beta.
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SMART; SM00048; DEFSN; I.

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Neutrophil beta-defensin 1
Name=NBD12;
Bos taurus (Bovine).
Eukaryota; Metazoa; Chorda
Mammalia; Eutheria; Cetart
Bovinae; Bos.
NCBI_TaxID=9913;
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ntibiotic; Signal.
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teric beta-defensin: molecular cloning
e with inducible intestinal epithelial
h Cryptosporidium parvum infection.";
ect. Immun. 66:1045-1056(1998).
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lagher D.S. Jr., Ryan A.M., Diamond G., Bevins C.L., Womack conatic cell mapping of beta-defensin genes to cattle syntenic and fluorescence in situ localization to chromosome 27.";
n. Genome 6:554-556(1995).
FUNCTION: Has antibacterial activity (Potential).
SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: Inducibly expressed in enteric epithelia cells.
SIMILARITY: Belongs to the beta-defensin family. LAP/TAP subfamily.
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"Cloning and expression of bovine neutrophil beta-defensins.

Biosynthetic profile during neutrophilic maturation and localization of mature peptide to novel cytoplasmic dense granules.";

J. Biol. Chem. 274:26249-26258(1999).

EMBL; AF105370; AAD43032.1; -.

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InterPro; IPR001855; Defensin_beta.

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C;Species: Bos primigenius taurus (cattle)
C;Date: 05-Jan-1996 #sequence_revision 05-Jan-1996 #text_cha
C;Accession: A56128; B56128
R;Schonwetter, B.S.; Stolzenberg, E.D.; Zasloff, M.A.
Science 267, 1645-1648, 1995
A;Title: Epithelial antibiotics induced at sites of inflamma
A;Reference number: A56128; MUID:95192714; PMID:7886453
A;Accession: A56128
A;Molecule type: mRNA
A;Residues: 1-64 <SCH>
A;Accession: B56128
A;Accession: B56128
A;Accession: B56128
A;Molecule type: protein
A;Residues: 23-64 <SC2>
C;Keywords: antibacterial; antifungal
F;1-20/Domain: signal sequence #status predicted <SIG>
F;23-64/Product: lingual antimicrobial peptide #status expe
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C;Superfamily: crotamine

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A;Cross-references: UNIPROT:P24331
C;Superfamily: crotamine
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airway epithelial antimicrobial peptide, tracheal
C; Species: Bos primigenius taurus (cattle)
C; Date: 13-Jan-1995 #sequence revision 13-Jan-1995 #text_(
C; Accession: A47438; A39397
R; Diamond, G.; Jones, D.E.; Bevins, C.L.
Proc. Natl. Acad. Sci. U.S.A. 90, 4596-4600, 1993
A; Title: Airway epithelial cells are the site of expression
A; Reference number: A47438; MUID:93281626; PMID:8506305
A; Rcession: A47438
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-64 < DIA>
A; Cross-references: UNIPROT:P25068; GB:L13373; NID:928939:
R; Diamond, G.; Zasloff, M.; Eck, H.; Brasseur, M.; Maloy, Proc. Natl. Acad. Sci. U.S.A. 88, 3952-3956, 1991
A; Title: Tracheal antimicrobial peptide, a cysteine-rich [
A; Title: Tracheal antimicrobial peptide, a cysteine-rich [
A; Reference number: A39397
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-64 < DI2>
A; Cross-references: GB:M63023; NID:92226433; PIDN:AAB6175:
C; Genetics:
A; Introns: 19/2
F; 1-26/Domain: signal sequence #status predicted <SIG>
F; 1-26/Product: airway epithelial antimicrobial peptide:
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R; Smith, L.A.; Schmidt, J.J. Toxicon 28, 575-585, 1990

A; Title: Cloning and nucleotid A; Reference number: A35947; MU A; Accession: C35947

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RESULT 5

JC5324

myotoxin a precursor - prairie rattlesnake
C; Species: Crotalus viridis viridis (prairie rattlesnake)
C; Species: Crotalus viridis (prairie rattlesnake)
C; Date: 15-May-1997 #sequence_revision 18-Jul-1997 #text_change 02-Jul-
C; Accession: JC5324
R; Norris, J.W.; Fry, R.M.; Tu, A.T.
Biochem. Biophys. Res. Commun. 230, 607-610, 1997
A; Title: The nucleotide sequence of the translated and untranslated reg
A; Title: The nucleotide sequence of the translated and untranslated reg
A; Reference number: JC5324; MUID:97167753; PMID:9015371
A; Accession: JC5324
A; Molecule type: mRNA
A; Residues: 1-65 < NOR>
A; Residues: 1-65 < NOR>
A; Residues: 1-65 < NOR>
A; Rote: the authors translated the codon CAG for residue 27 as His and C; Comment: This protein inhibits Ca2+ uptake into the sarcoplasmic reti
C; Superfamily: crotamine
C; Superfamily: crotamine
F; 1-22/Domain: signal sequence #status predicted <MAT>
F; 23-64/Product: myotoxin a #status predicted <MAT>
                                                                                                            RESULT 6
F45495
beta-defensin-(
N;Alternate nar
C;Species: Bos
C;Date: 24-Feb.
C;Accession: F4
R;Selsted, M.E
J. Biol. Chem.
A;Title: Purif:
A;Reference nur
A;Accession: F4
A;Molecule typ(
A;Residues: 1-4
A;Cross-referen
A;Note: sequenc
C;Keywords: ant
F;1-42/Product:
F;1/Modified si
F;9-38,16-31,21
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Note: sequence modified after extraction from NCBI backbone Reywords: antibacterial; disulfide bond; pyroglutamic acid 1-42/Product: beta-defensin-6 #status experimental <MAl>1/Modified site: pyrrolidone carboxylic acid (Gln) #status 9-38,16-31,21-39/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                              ternate names: peptide BNBD-6
scies: Bos primigenius taurus (cattle)
te: 24-Feb-1994 #sequence_revision 22-Apr-1995 #t
session: F45495
lsted, M.E.; Tang, Y.Q.; Morris, W.L.; McGuire, P
iol. Chem. 268, 6641-6648, 1993
tle: Purification, primary structures, and antiba
ference number: A45495; MUID:93203264; PMID:84546
session: F45495
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les: 1-42 <SEL>
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ed. No. 0.0019;
Mismatches 14
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RESULT 7

B35947

crotamine 2 precursor - tropic C; Species: Crotalus durissus t C; Date: 14-Dec-1990 #sequence_C; Accession: B35947

R; Smith, L.A.; Schmidt, J.J.

Toxicon 28, 575-585, 1990

A; Title: Cloning and nucleotic A; Reference number: A35947; Mu
A; Accession: B35947

A; Status: preliminary; not com A; Molecule type: mRNA
A; Residues: 1-64 < SMI>
A; Cross-references: UNIPROT: P2
C; Superfamily: crotamine
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847753

beta-defensin-11 - bovine
N; Alternate names: peptide BNBI
C; Species: Bos primigenius taus
C; Date: 24-Feb-1994 #sequence_
C; Accession: B47753

R; Selsted, M.E.; Tang, Y.Q.; Mo
J. Biol. Chem. 268, 6641-6648,
A; Title: Purification, primary
A; Reference number: A45495; MU
A; Accession: B47753
A; Molecule type: protein
A; Residues: 1-38 <SEL>
A; Note: sequence extracted from
C; Keywords: antibacterial; dist
F; 1-38/Product: beta-defensin-
F; 1-34, 12-27, 17-35/Disulfide bo
      RESULT 9
C45495
beta-defensin-3 - bovine
N;Alternate names: peptic
N;Contains: beta-defensir
C;Species: Bos primigeniu
C;Date: 24-Feb-1994 #sequ
C;Accession: C45495; B454
R;Selsted, M.E.; Tang, Y.
J. Biol. Chem. 268, 6641-
A;Title: Purification, property of the purification of the puri
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A;Accession: C45495
A;Molecule type: protein
A;Residues: 1-42 <SEL>
A;Cross-references: UNIPROT:P46160
A;Cross-references: UNIPROT:P46160
A;Cross-references: UNIPROT:P46160
A;Note: sequence modified after extraction from NCBI backbone
A;Accession: B45495
A;Molecule type: protein
A;Residues: 3-42 <SE2>
A;Note: sequence extracted from NCBI backbone (NCBIP:127952)
C;Keywords: antibacterial; disulfide bond; pyroglutamic acid
F;1-42/Product: beta-defensin-3 #status experimental <MA1>
F;3-42/Product: beta-defensin-2 #status experimental <MA2>
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental <MA2>
F;9-38,16-31,21-39/Disulfide bonds: #status predicted
         macrophage antibiotic peptide MCP-1 - rabbit
N;Alternate names: antiadrenocorticotropin, corticostatic pep
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 28-Aug-1985 #sequence revision 23-Feb-1996 #text_char
C;Accession: A45811; A01647; A22569; B49195
R;Ganz, T.; Rayner, J.R.; Valore, E.V.; Tumolo, A.; Talmadge,
J. Immunol. 143, 1358-1365, 1989
A;Title: The structure of the rabbit macrophage defensin gene
A;Reference number: A45811
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-95 <GAN>
A;Cross-references: UNIPROT:P01376; GB:M28072; NID:g165473; F
R;Selsted, M.E.; Brown, D.M.; DeLange, R.J.; Lehrer, R.I.
J. Biol. Chem. 258, 14485-14489, 1983
A;Title: Primary structures of MCP-1 and MCP-2, natural pepti
A;Reference number: A01647; MUID:84061901; PMID:6643497
A;Accession: A01647
A;Molecule type: protein
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C;Species: Crotalus adamanteus (eastern diamondback rat
C;Date: 31-Jan-1992 #sequence_revision 31-Jan-1992 #te)
C;Accession: A37909
R;Samejima, Y.; Aoki, Y.; Mebs, D.
Toxicon 29, 461-468, 1991
A;Title: Amino acid sequence of a myotoxin from venom c
A;Reference number: A37909
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-45 <SAM>
A;Cross-references: UNIPROT:P24330
C;Superfamily: crotamine
C;Keywords: myotoxin
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JSION: A450-14489, GB:M28072; NID:G165470

S-references: UNIPROT:P01376; GB:M28072; NID:G165470

S-references: UNIPROT:P01376; GB:M28072; NID:G165477

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3; Mismatches
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RESULT 12
G45495
beta-defensin-7 - bovine
N;Alternate names: peptide BNBD-7
C;Species: Bos primigenius taurus (cattle)
C;Date: 24-Feb-1994 #sequence_revision 22-Apr-1995 #text
C;Accession: G45495
R;Selsted, M.E.; Tang, Y.Q.; Morris, W.L.; McGuire, P.A.
J. Biol. Chem. 268, 6641-6648, 1993
A;Title: Purification, primary structures, and antibacte
A;Reference number: A45495; MUID:93203264; PMID:8454635
A;Accession: G45495
A;Accession: G45495
A;Rosidues: 1-40 <SEL>
A;Cross-references: UNIPROT:P46165
A;Note: sequence modified after extraction from NCBI bac
C;Keywords: antibacterial; disulfide bond; pyroglutamic
F;1-40/Product: beta-defensin-7 #status experimental <MP
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #st
F;9-38,16-31,21-39/Disulfide bonds: #status predicted
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Chem. 260, 4579-4584
A; Title: Primary structures of A; Accession: A22569
A; Molecule type: protein A; Residues: 63-95 <SE2>
A; Experimental source: peritor R; Zhu, Q.; Solomon, S.
Endocrinology 130, 1413-1423, A; Title: Isolation and mode of A; Accession: B49195
A; Reference number: A49195; MA; Accession: B49195
A; Status: preliminary
A; Molecule type: protein A; Residues: 63-95 <ZHU>
A; Note: sequence extracted from C; Comment: This peptide is acce; C; Superfamily: mammalian defect; Keywords: antibacterial F; 65-93, 67-82, 72-92/Disulfide
RESULT 13

145495
beta-defensin-9 - bovine
N;Alternate names: peptide BNBD-
N;Contains: beta-defensin-8
C;Species: Bos primigenius tauru
C;Date: 24-Feb-1994 #sequence_re
C;Accession: I45495; H45495
R;Selsted, M.E.; Tang, Y.Q.; Mor
J. Biol. Chem. 268, 6641-6648, 1
A;Title: Purification, primary s
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ssion: A01737 cule type: pro dues: 1-43 <MA

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: Some chemical properties of the vence number: A01737; MUID:79015339;

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A;Reference number: A45495; MUID:932
A;Accession: I45495
A;Molecule type: protein
A;Residues: 1-40 <SEL>
A;Cross-references: UNIPROT:P46166
A;Note: sequence modified after extra
A;Accession: H45495
A;Molecule type: protein
A;Residues: 3-40 <SE2>
A;Note: sequence extracted from NCBI
C;Keywords: pyroglutamic acid
F;1-40/Product: beta-defensin-9 #staf
F;3-40/Product: beta-defensin-8 #staf
F;1/Modified site: pyrrolidone carbo:
F;9-38,16-31,21-39/Disulfide bonds: 1
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N; Alternate
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ate: 24-Feb-1994 #sequence_revision 18-Nov-1994 #t
ccession: D47753; C47753
elsted, M.E.; Tang, Y.Q.; Morris, W.L.; McGuire, P
Biol. Chem. 268, 6641-6648, 1993
itle: Purification, primary structures, and antiba
eference number: A45495; MUID:93203264; PMID:84546
ccession: D47753
olecule type: protein
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prds: disulfide bond

/product: beta-defensin-13 #

/product: beta-defensin-12 #

/product: beta-defensin-12 #
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A;Cross-references: UNIPROT:P01477
C;Superfamily: crotamine
C;Keywords: myotoxin; venom
F;4-36,11-30,18-37/Disulfide bonds: #status predicted
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US-10-409-532-2
US-09-917-340-52
US-09-917-340-72
US-09-872-852-2
US-09-872-852-2
US-10-409-366-10
US-10-409-366-10
US-10-409-366-10
US-09-872-852-4
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equence 41, App	equence 41, App	equence 41, App	equence 42, App	equence 42, App	equence 42, App	equence 42, App	equence 39, App	equence 39, App	equence 39, App	equence 39, App	equence 40, App	equence 40, App	equence 40, App	quence	quence 3, Appli	Sequence 37, App	equence 37, App	equence 37, App	equence 37, App	equence 38, Ap	equence 38, App	equence 38, App	equence 38, App	equence 35, App	equence 35, App	equence 35, App	equence 35, App	equence 36, App	quence 36, App	equen

RESULT 1
US-10-091-166B-2
Sequence 2, Application US/10091166B;
Publication No. US20030143671A1
GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul C.
TITLE OF INVENTION: NOTEL BETA-DEFENSINS
FILE REFERENCE: 97-44D1
CURRENT APPLICATION NUMBER: US/10/091,166B
CURRENT APPLICATION NUMBER: US 09/636,399
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR FILLING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR FILLING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR FILLING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 65
TYPE: PRT
CRGANISM: Homo sapiens
US-10-091-166B-2

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Query Match Best Local Matches 6 Match 100.0%;
Similarity 100.0%;
65; Conservative 0 o ~• Score 357; DB 14; Pred. No. 3.2e-35; Mismatches 0; Length Indels გ წ 0 Gaps

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US-10-409-366-2
; Sequence 2, Application US/10409366
; Publication No. US20030166912A1
; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
; CURRENT APPLICATION NUMBER: US/10/409,366
; CURRENT FILING DATE: 2003-04-07
PRIOR APPLICATION NUMBER: US/09/636,399A
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR FILING DATE: 1997-10-09
; PRIOR FILING DATE: 1997-10-09
; PRIOR FILING DATE: 1997-11-05
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CURRENT APPLICATION NUMBER: US/10/272,121
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 2000-08-10
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/058,335
PRIOR APPLICATION NUMBER: US 60/058,335
PRIOR FILING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
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TITLE OF IN
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TYPE: PRT
ORGANISM: Homo
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IT: Baindur, Nand
IT: Beigel-Orme, St
IT: Sheppard, Paul
INVENTION: NOVEL I
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WS-10-409-532-2
; Sequence 2, Application US/10409532
; Publication No. US20030166913A1
; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/10/409,532
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
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LENGTH: 6
TYPE: PRI
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PREFILING DATE: 1998-09-10
PRAPPLICATION NUMBER: 09/636,399
PREFILING DATE: 2000-08-10
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PWARE: FastSEQ for Windows Version
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Pred. No. 3.2e-35;
Mismatches 0;
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CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                APPLICANT: Murphy, Christopher J.
APPLICANT: McAnulty, Jonathan F.
APPLICANT: Reid, Ted W.
TITLE OF INVENTION: Transplant Media
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,34
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR APPLICATION NUMBER: 60/249,632
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
SOFTWARE: Patentin Ver. 2.0
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                                                                       Query Match
Best Local
Matches 6
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Patent No. US20020090369A1
GENERAL INFORMATION:
APPLICANT: Murphy, Christopher J.
APPLICANT: McAnulty, Jonathan F.
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                                                                                                                                 SOFTWARE: P
SEQ ID NO 72
LENGTH: 67
TYPE: PRT
ORGANISM:
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TYPE: PRT
ORGANISM:
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Pred. No.
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Pred. No. 3.;
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; LENGTH: 67
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description
; OTHER INFORMATION: Peptide
US-09-872-852-2
US-10-091-1668-10
; Sequence 10, Application US/10091166B
; Publication No. US20030143671A1
; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44D1
CURRENT APPLICATION NUMBER: US/10/091,166B
CURRENT FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: US 60/058,335
PRIOR FILING DATE: 1997-09-10

NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10
LENGTH: 67
TYPE: PRT
ORGANISM: Homo sapiens
US-10-091-166B-10
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Pred. No. 3.3e-35;
Mismatches 0;
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CURRENT APPLICATION NUMBER: US/10/272,121
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/058,335
PRIOR FILING DATE: 1997-11-05
PRIOR FILING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
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Best 1
Match
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/10/409,366
CURRENT FILING DATE: 2003-04-07
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Best Local &
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GENERAL INFORMATION
ADDITICANT: Adder,
                                                                                                                                                                                                      Sequence 10, Applica Publication No. US20 GENERAL INFORMATION:
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TITLE OF IN
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lication No
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T: Beigel-Orme, St
T: Sheppard, Paul
INVENTION: NOVEL I
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Pred. No. 3.;
Mismatches
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3.3e-35
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; SEQ ID NO 10
; LENGTH: 67
; TYPE: PRT
; ORGANISM: Homo &
US-10-409-366-10
                                                                                                                                       GENERAL INFORMATION.

APPLICANT: Adler, David A.

APPLICANT: Holloway, James L.

APPLICANT: Beigel-Orme, Stephanie

APPLICANT: Sheppard, Paul O.

TITLE OF INVENTION: NOVEL BETA-DEFENSINS

FILE REFERENCE: 97-44C2

CURRENT APPLICATION NUMBER: US/10/409,532

CURRENT FILING DATE: 2003-04-07

PRIOR APPLICATION NUMBER: US/09/636,399A

PRIOR APPLICATION NUMBER: 60/058,335

PRIOR APPLICATION NUMBER: 60/064,294

PRIOR FILING DATE: 1997-10-09

PRIOR APPLICATION NUMBER: 09/150,786

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR FILING DATE: 1998-09-10

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR FILING DATE: 2000-08-10

NUMBER OF SEQ ID NOS: 72

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 10

LENGTH: 67

TYPE: PRT

ORGANISM: Homo sapiens

US-10-409-532-10
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3-10-409-532-10
Sequence 10, Application US/10409532
Publication No. US20030166913A1
GENERAL INFORMATION:
GENERAL Adler, David A.
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R FILING DATE: 2000-08-10
R APPLICATION NUMBER: 60/058,335
R FILING DATE: 1997-10-09
R FILING DATE: 1997-11-05
R APPLICATION NUMBER: 09/150,786
R APPLICATION NUMBER: 09/150,786
R FILING DATE: 1998-09-10
R APPLICATION NUMBER: 09/636,399
R APPLICATION NUMBER: 09/636,399
R APPLICATION NUMBER: 09/636,399
R APPLICATION NUMBER: 72
PARE: FastSEQ for Windows Version
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Pred. No. 3.3e-3
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Pred. No. 3.3e-35;
Mismatches 0;
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Sequence 4, Application US/09872852;
Patent No. US20020115602A1
GENERAL INFORMATION:
APPLICANT: MCCRAY JR, PAUL B.
APPLICANT: TACK, BRIAN
APPLICANT: JIA, HONG PENG
APPLICANT: SCHUTTE, BRIAN C.
TITLE OF INVENTION: HUMAN BETA-DEFENSIN-3 (HBD-3), I
TITLE OF INVENTION: BETA-DEFENSIN ANTIMICROBIAL PEI
FILE REFERENCE: IOWA:031US
CURRENT APPLICATION NUMBER: US/09/872,852
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: 60/208,792
PRIOR FILING DATE: 2000-06-01
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 4
LENGTH: 45
TYPE: PPT
                                                                                                                     CURRENT FILING DATE: 2003-07-11

NUMBER OF SEQ ID NO 27

LENGTH: 44

TYPE: --

CURRENT: Adermann, Knut

FILE REFERENCE: 022584us

CURRENT APPLICATION NUMBER: US/10/332,765

CURRENT FILING DATE: 2003-01-13

PRIOR APPLICATION NUMBER: DE10033505.5

PRIOR FILING DATE: 2000-07-11

NUMBER OF SEQ ID NOS: 78

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 27

LENGTH: 44
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Matches 43
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Matches 42
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Publication No. US20040116652A1
GENERAL INFORMATION:
APPLICANT: Forsemann, Wolf-Georg
APPLICANT: Conejo-Garcia, Jose-Ramon
APPLICANT: Adermann, Knut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: 1
OTHER INFORMATION: 1
-09-872-852-4
                                                                                            TYPE: PRT
ORGANISM: Homo
10-332-765-27
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APPLICANT: Sheppard, ran-
PITLE OF INVENTION: NOVEL BETA-UBERTITLE OF INVENTION: NOVEL BETA-UBERTITLE OF INVENTION: NOVEL BETA-UBERTITLE OF INVENTION: NOVEL BETA-UBERTITE OF INVENTION: NOVEL BETA-UBERTITE OF INVENTION NUMBER: US/10/091,166B
CURRENT APPLICATION NUMBER: US/10/091,166B
CURRENT FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/058,335
PRIOR APPLICATION NUMBER: US 60/058,335
PRIOR FILING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
FastSEQ for Windows Version 4.
                                                                                                                       ; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (45)...(
; OTHER INFORMATION:
; OTHER INFORMATION:
US-10-091-166B-36
4
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LENGTH: 48
TYPE: PRT
ORGANISM: Artificial SEATURE:
OTHER INFORMATION: Del
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ER INFORMATION: leucine, isoleucine,
ER INFORMATION: methionine
91-166B-36
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F: Holloway, James L.
F: Baindur, Nand
F: Beigel-Orme, Stephanie
F: Sheppard, Paul O.
INVENTION: NOVEL BETA-DEFENSINS
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                                                           1 64.7%;
Similarity 91.5%;
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Application US/100 to. US20030143671A1
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US-10-272-121-36
US-10-272-121-36

Sequence 36, Application US/10272121
; Publication No. US20030157638A1
; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44D2
CURRENT APPLICATION NUMBER: US/10/272,121
CURRENT APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR FILING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 36

RESULT 14 US-10-091-166B-36

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NAME/KEY: VARIANT

LOCATION: (45)...(45).

OTHER INFORMATION: leucine, isoleucine,

OTHER INFORMATION: methionine

US-10-272-121-36
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Matches 43
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TYPE: PRT
ORGANISM: Artificial:
FEATURE:
OTHER INFORMATION: De:
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; Sequence 2, Application US/09636399A
; Patent No. 6576755
; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.C
SEQ ID NO 2
LENGTH: 65
TYPE: PRT
ORGANISM: Homo sapiens
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ence 10, Application US/09
nt No. 6576755
RAL INFORMATION:
LICANT: Adler, David A.
LICANT: Holloway, James 1
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APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
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APPLICANT: McAnulty, Jonathan F.
APPLICANT: Reid, Ted W.
TITLE OF INVENTION: Transplant Media
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR FILING DATE: 2000-11-17
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 52
LENGTH: 67
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SEQ ID NO 1
LENGTH: 6
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ORGANISM: Homo
09-636-399A-10
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ORGANISM:
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Pred. No. 2e;
Mismatches
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; LENGTH: 67
; TYPE: PRT
; ORGANISM: Homo s
US-09-917-340-72
Sequence 36, Application US/09636399A; Patent No. 6576755; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: 60/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
SEQ ID NO 36
LENGTH: 48
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Defensin polypeptide
NAME/KEY: VARIANT
LOCATION: (45)...(45)
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US-09-
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APPLICANT: McAnulty, Jonathan F.
APPLICANT: Reid, Ted W.
TITLE OF INVENTION: Transplant Media
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,3
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 72
LENGTH: 67
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US-09-6
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ce 72, Application US/09917340
No. 6696238
L INFORMATION:
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Patence Applicant: Adler, David Applicant: Adler, David Applicant: Holloway, James L. Applicant: Baindur, Nand Applicant: Baindur, Nand Applicant: Beigel-Orme, Stephanie Applicant: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
COFTWARE: FastSEQ for Windows Version 3.0
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US-09-636-
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Sequence 38, Application US/09636399A; Patent No. 6576755; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,39
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
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equence 38,
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FEATURE:
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Pred. No. 8
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RESULT US-09-6

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APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 37
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TYPE: PRT
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                             FEATURE:
OTHER INFORMATION: Defensin polypeptide
NAME/KEY: VARIANT
LOCATION: (44)...(44)
OTHER INFORMATION: Xaa is Leu, Ile, Phe
)9-636-399A-37
                                                                                                                                                                                              LENGTH: 48
TYPE: PRT
ORGANISM: Artificial Sequence
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tches 4
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R APPLICATION NUMBER: 09/150,786
R FILING DATE: 1998-09-10
R APPLICATION NUMBER: 09/636,399
R FILING DATE: 2000-08-10
ER OF SEQ ID NOS: 72
WARE: FastSEQ for Windows Version 3
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Similarity 91.3%;
42; Conservative
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                                                        62.7%;
Similarity 91.3%;
2; Conservative
GHGGIINTLQKYYCRVRGGRCAVLSCLPKEEQIGKCSTRGRKCCRR 65
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Pred. No. 5.7e-21;
); Mismatches 4;
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                                                          Score 224; DB 4; Pred. No. 5.9e-21; Mismatches 4
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APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-00-10
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US-09-636-3
; Sequence
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                                                                                    APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSING
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,35
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR FILING DATE: 1997-10-09
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40, Application patent No. 6576755
GENERAL INFORMATION:
APPLICANT: Adler, Dav.
APPLICANT: Holloway,
APPLICANT: Baindur, I
APPLICANT: Beigel-Ort
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Ma
Best Loc
Matches
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ORGANISM: Artificial SefEATURE:
OTHER INFORMATION: DefENAME/KEY: VARIANT
LOCATION: (43)...(43)
OTHER INFORMATION: Xaa
-09-636-399A-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2000-08-1
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Window
SEQ ID NO 40
LENGTH: 46
                               TYPE: PRT ORGANISM:
FEATURE:
                                                           LENGTH:
                                                                              ID NO
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RESULT
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Sequence 41, Application US/09636399A; Patent No. 6576755; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2; CURRENT APPLICATION NUMBER: US/09/636,399A; CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335; PRIOR FILING DATE: 1997-10-09
                                                                                                                                                                                    RESULT 12
US-09-636
; Sequenc
; Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 42
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ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Defensin polypeptide
NAME/KEY: VARIANT
LOCATION: (42) ... (42)
OTHER INFORMATION: Xaa is Leu, Ile, Phe,
OTHER INFORMATION: Xaa is Leu, Ile, Phe,
OS-636-399A-42
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SEQ ID NO
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R INFORMATION: Xaa is
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Similarity 91.1%;
H1; Conservative
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Pred. No. 3.2e-2
0; Mismatches
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Pred. No. 3.1e-19;
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PRIOR APPLICATION NUMBER: 60/064,29
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,78
PRIOR APPLICATION NUMBER: 09/636,39
PRIOR APPLICATION NUMBER: 09/636,39
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows VersiseQ ID NO 41
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US-09-636-3
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; Patent No
; GENERAL I
; APPLICAN
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                                                                                    APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSIN
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,3
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION SERVING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3
SEQ ID NO 44
LENGTH: 44
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Defensin polypeptic
NAME/KEY: VARIANT
LOCATION: (41)...(41)
OTHER INFORMATION: Xaa is Leu, Ile, Pl
US-09-636-399A-44
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GENERAL INFO...

APPLICANT: Adler, Dames D.

APPLICANT: Baindur, Nand

APPLICANT: Beigel-Orme, Stephanie

APPLICANT: Beigel-Orme, Stephanie

APPLICANT: Sheppard, Paul O.

TITLE OF INVENTION: NOVEL BETA-DEFENSINS

FILE REFERENCE: 97-44C2

CURRENT APPLICATION NUMBER: US/09/636,399A

CURRENT FILING DATE: 2000-08-10

PRIOR APPLICATION NUMBER: 60/058,335

PRIOR APPLICATION NUMBER: 60/064,294

PRIOR APPLICATION NUMBER: 09/150,786

PRIOR APPLICATION NUMBER: 09/150,786

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR FILING DATE: 1998-09-10

PRIOR FILING DATE: 2000-08-10

NUMBER OF SEQ ID NOS: 72

SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -60-Sn
                                                                                                                            SOFTWARE: FastSEQ ID NOS: 72
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SEQ ID NO 43
LENGTH: 45
TYPE: PRT
ORGANISM: Artificial Seq
FEATURE:
OTHER INFORMATION: Defen
NAME/KEY: VARIANT
LOCATION: (41)
OTHER INFORMATION: Xaa i
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No. 6576755

L INFORMATION:

ICANT: Adler, David A.

ICANT: Holloway, James

ICANT: Baindur, Nand

ICANT: Beigel-Orme, St

ICANT: Sheppard, Paul

2 OF INVENTION: NOVEL E

REFERENCE: 97-44C2
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US-09-636-399A-22

Sequence 22, Application US/09636399A

patent No. 6576755

GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITILE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2

CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 22
LENGTH: 42
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Defensin polypeptide

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                                                                                                            This invention describes the novel active, mature human proteins 2 and SAP-3 which have antibiotic, antibacterial, antifungal and antiviral activity. (I), and their precursors, are useful for tre preventing microbial infections (caused by bacteria, fungi or vir particularly where they (or human cells expressing them) are included dressings, and to produce specific antibodies (Ab) or their fragments. Ab are used as diagnostic reagents, e.g. to detect a deficiency of (I) or the presence of a (I) variant. This sequence represents the human SAP-3 protein described in the method of the invention
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                       TRP/) MURPHY C
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Reid TW,
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2000US-0249602F.
2001US-0290932F.
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  Mcanulty JF;
                                                                                                                                                                                    forming agent; kidney transplant; defensin.
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Media comprising antimicrobial polypeptides or pore forming agents cell surface receptor binding compounds useful for the storage and preservation of organs prior to transplant.

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2002-268995/31.

Claim .. & Page 28; 78pp; English.

The invention describes new transplant compositions comprising antimicrobial polypeptides or pore forming agents and/or cell surface receptor binding compounds. The media is capable of extending the preservation period past 72 hours and can provide organs with increased functionality upon transplant, animals receiving kidneys stored in the media of the present invention for either three or four days had serum creatinine levels of less than half of those observed in control animals or ceiving kidneys stored in UW solution (defined in the specification) and a more preferable prognosis for the transplant patient. The media of the invention are useful for decreasing the incidence and/or severity of delayed graft function in patients receiving transplanted kidneys stored and/or treated in the media. The media may also be used in procedures corgans leads to a decrease in chronic rejection. This sequence represents can antimicrobial defensin peptide studied in the development of the and/or such a organs an ant transp rgans leads to a n antimicrobial d ransplant media

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RES RES SULT ( 3 **U91036**; U91036 standard; peptide; 67

Ä 05 ansplant media associated defensin peptide #37.

(first

entry)

Trans ansplant; i
ll surface antimicrobial peptide; pore receptor binding compound; forming kidney t | agent; transplant; cardioplegia;

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                                                                                                                                                                                                                                                                                                                                              The invention describes new transplant compositions comprising antimicrobial polypeptides or pore forming agents and/or cell surface receptor binding compounds. The media is capable of extending the preservation period past 72 hours and can provide organs with increased functionality upon transplant. animals receiving kidneys stored in the media of the present invention for either three or four days had serum creatinine levels of less than half of those observed in control animals calone. Lower serum creatinine levels are indicative of healthier kidneys and a more preferable prognosis for the transplant patient. The media of the invention are useful for decreasing the incidence and/or severity of cand/or treated in the media. The media may also be used in procedures such as cardioplegia. It is contemplated that transplant of healthier contemplated that transplant of healthier serious leads to a decrease in chronic rejection. This sequence represents containing the media defensin peptide studied in the development of the transplant of the contemplated that transplant of healthier contemplated that transplant of healthier transplant media.
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Human; beta-defensin-3; hBD-3; bacterial infection; gene therapy; respiratory system; cystic fibrosis; inflammation; urogenital tract antibacterial; fungicide; cytostatic; antiinflammatory; antiulcer; gastrointestinal tract; septicaemia; apoptosis induction; cancer.
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                                           This invention describes the novel active, mature human proteins (I) SAP-2 and SAP-3 which have antibiotic, antibacterial, antifungal and antiviral activity. (I), and their precursors, are useful for treating or preventing microbial infections (caused by bacteria, fungi or viruses), particularly where they (or human cells expressing them) are included in wound dressings, and to produce specific antibodies (Ab) or their fragments. Ab are used as diagnostic reagents, e.g. to detect a deficiency of (I) or the presence of a (I) variant. This sequence represents the mature human SAP-3 protein described in the method of the invention
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                                  ABR43496 to ABR43577 represent beta-defensin antimicrobial peptides (I) have antibacterial activity and can be used in vaccines, and in gent therapy. (I) can be used for preventing microbial growth, for treating infections (e.g. pilmonary infections), for reducing resistance to antimicrobials and antibiotics, and for inhibiting multidrug resistant bacteria. The antimicrobial peptides may be included in food preparations, pharmaceutical preparations, medicinal and pharmaceutical products, cleaning agents, as well as to any material to which the peptides could be sprayed on or adhered to where inhibition of microbial growth on sucl material is desired. The antimicrobial peptides and nucleic acids encoding them may be used in gene therapy. ABR43578 to ABR43610 represent human beta-defensin peptides given in an example from the present
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P83943 shinchilla
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## ALIGNMENTS

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DIO_HUMAN

STANDARD; PRT; 67 AA.

DIO_HUMAN

PRI34, 08NEG; 09NFF;

PRI 16-CCT-2001 (Rel. 40, Created)

16-CCT-2001 (Rel. 40, Created)

16-CCT-2004 (Rel. 40, Last sequence update)

16-CCT-2004 (Rel. 40, Last sequence update)

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EMBL; AF295370; AAG02237.1; -.

EMBL; AF217245; AAF73853.1; -.

EMBL; AF217245; AAF73853.1; -.

EMBL; AF301470; AAG22030.1; -.

EMBL; AF516673; AAM62424.1; -.

PDB; 1KJ6; NMR; A=23-66.

Genew; HGNC:15967; DEFB103A.

MIM; 606611; -.

GO; GO:0005576; C:extracellular; NAS.

GO; GO:0005576; C:extracellular; NAS.

GO; GO:0006965; P:anti-Gram-positive ba

InterPro; IPR001855; Defensin_beta.

Pfam; PF00711; Defensin_beta; 1.

3D-structure; Antibiotic; Direct protei

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DT 29-MAR-2004 (Rel. 44, Last annotation update)
DT (Fragment).

Reta-defensin 103A precursor (Beta-defensin 3) (DEFB-3) (BD-3)
DE (Fragment).

GN Name=DEFB103A; Synonyms=DEFB103, DEFB3;
GN Name=DEFB103A; DEFB103, DEFB103;
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DF Prepro-beta-defensin 3.
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chord
OC Mammalia; Eutheria; Cetar
OX NCBI_TaxID=9823;
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DR EMBL; AY460575; AAR88759.
SEQUENCE 67 AA; 7790 M
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InterPro; IPR001855; Defensin_be
Pfam; PF00711; Defensin_beta; 1.
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This SWISS-PROT entry is copyright. It is produced through a collaboration to between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/corsend an email to license@isb-sib.ch).

EMBL; AF093245; AAD29573.1; -.

REMBL; AF092929; AAD29572.1; -.

REMBL; AF092929; AAD29572.1; -.

REMBL; AF092929; AAD29572.1; -.

REMBL; AF092929; AAD29573.1; -.

REMBL; AF093245; Defb3.

REMBL; AF093245; Defb3.
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BD03 MOUSE

16-OCT-2001 (Rel. 40, Created)

16-OCT-2001 (Rel. 40, Last sequence update)

05-JUL-2004 (Rel. 44, Last annotation update)

05-JUL-2004 (Rel. 44, Last annotation update)

95-JUL-2004 (Rel. 40, Last annotation, update)

95-JUL-2004 (Rel. 40, Last ann
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Sang Y., Zhang G., Ross C.R., Blecha F.;
Sang Y., Zhang G., Ross C.R., Blecha F.;
"Characterization of porcine beta-defensin
porcine beta-defensin 1, 2 and 3.";
Submitted (NOV-2003) to the EMBL/GenBank/DE
EMBL; AY460575; AAR88759.1; -.
SEQUENCE 67 AA; 7790 MW; 6BC28264846572
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Biol. Chem. 275:33314-33320(2000).
E.coli and P.aeruginosa.
E.coli and P.aeruginosa.
- SUBCELLULAR LOCATION: Secreted.
- TISSUE SPECIFICITY: Highest expression in salivary glands, epididymis, ovary and pancreas and to a lesser extent in lung, liver and brain. Low or no expression in skeletal muscle and
                                                                                                                                                                                                                                                                                                                                                     tongue.
INDUCTION: B
SIMILARITY:
subfamily.
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Similarity 100.0%;
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EMBL/GenBank/DDBJ databases
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Sciurognathi; Muridae;
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05-JUL-2004 (Rel. 44, Created)

05-JUL-2004 (Rel. 44, Last sequence upont of the content of the
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Eukaryota; Metazoa; Chordata
Mammalia; Eutheria; Rodentia
NCBI_TaxID=10090;
[1]
SEQUENCE FROM N.A.
Adler D.A., Holloway J.L., H
Fox B., Gosink J., Sheppard
Stamm M., Laube D., Diamond
Submitted (NOV-2000) to the
EMBL; AF318068; AAG49340.1;
MGD; MGI:1933153; Defb5.
SEQUENCE 64 AA; 7087 MW;
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SMART; SM0004
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Q91V82;
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Beta-defensin 8 (Beta-defensi) Name=Defb8;
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Metazoa; Chordata; Metazoa; Chordata; NCBI_TAXID=10090;
[1]
SEQUENCE FROM N.A.
TISSUE=Lung;
Conejo-Garcia J.R., Nehls M.C Kluever E., Liepke C., Adermansubmitted (JUL-2001) to the ENEL [2]
SEQUENCE FROM N.A.
TISSUE=Lung;
Krause A.;
Submitted (APR-2001) to the ENEL [2]
SHBL; AJ300674; CAC44635.1; -EMBL; AJ300673; CAC44634.1; -PDB; 124R; NMR; A=26-60.
MGD; MGI:2654206; Defb8.
GO; GO:0042742; P:defense resp
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1V82;
-DEC-2001 (TrEMBLrel. 19, Created)
-DEC-2001 (TrEMBLrel. 19, Last sequence update)
-JUL-2004 (TrEMBLrel. 27, Last annotation update)
ta-defensin 8 (Beta-defensin 6).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pressed by the chinchilla (Chinchilla lanigera) airway.";
Biol. Chem. 279:20250-20256(2004).
FUNCTION: Has antibacterial activity against Gram-positive bacterium S.pneumoniae Serotype 14. Is also active against Gram-negative bacteria M.catarrhalis 1857, and nontypeable H.influenzae strains 86-028NP and 1128. Has antifungal activity against C.albicans. May have a role in maintaining sterility in the middle ear.
SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: Highly expressor?
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TISSUE SPECIFICITY: Highly expressed in tongue, I mucosa and skin, and to a lower extent in the Euglung and trachea.
NASS SPECTROMETRY: MW=5123; METHOD=Electrospray; NOTE=Ref.1.
SIMILARITY: Belongs to the beta-defensin family.
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Rodentia;
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Pred. No. 0.54;
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Murinae; Mus
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Q8R556;
Q8R556;
Q1-JUN-2002.(TrEMBLrel. 21, Created)
Q1-JUN-2002 (TrEMBLrel. 21, Last sequen
Q1-MAR-2004 (TrEMBLrel. 26, Last sequen
Q1 mus musculus (Mouse).

Eukaryota; Metazoa; Chordata; Craniata;
Mammalia; Eutheria; Rodentia; Sciurogna
NCBI_TaxID=10090;
[1]
SEQUENCE FROM N.A.
STRAIN=C57B1/6J;
MEDLINE=22213784; PubMed=12226710;
MOTISON G.M., Rolfe M., Kilanowski F.M
"Identification and characterisation a
related gene.";
Mamm. Genome 13:445-451(2002).
EMBL; AJ344114; CAC86998.1; -.
HSSP; Q15263; 1FD3.
MGD; MGI:2654206; Defense response to b
InterPro; IPR001855; Defensin_beta.
Pfam; PF00711; Defensin_beta; 1.
SEQUENCE 60 AA; .6820 MW; 3702A95649
DLT 11
2 RAT
BD02 RAT STANDARD;
C88:514;
15-JUL-1999 (Rel. 38, Create 15-JUL-1999 (Rel. 38, Last s 05-JUL-2004 (Rel. 44, Last a Beta-defensin 2 precursor (B Name=Defb2;
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata Mammalia; Eutheria; Rodentia NCBI_TaxID=10116;
[1]
SEQUENCE FROM N.A.
STRAIN=Wistar;
MEDLINE=99386883; PubMed=104 Jia H.P., Mills J.N., Barahm Mallampali R.K., Wang G., Wimolecular cloning and chara homologues of human beta-def
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                                               Med=10456937;
Barahmand-Pour
G., Wiles K., T
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Sciurognath
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BESULT 12

BD04_MOUSE

To -OCT-2001 (Rel. 40, Created)

To -OCT-2001 (Rel. 40, Last sequence update)

To -UT-2004 (Rel. 40, Last sequence update)

Beta-defensin 4 precursor (BD-4) (mBD-4).

Mus musculus (Mouse).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mus musculus (Mouse).

Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.

Mus musculus (Mouse).

Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.

Mus musculus (Mouse).

Mus musculus (Mouse).

Mus musculus (Mouse).

Musculus (BD-4) (mBD-4).

Musculus (BD-4) (mBD-4).

Musculus (Buntinae; Murinae; Musculus (Murinae; Musinae; Mus.

Musculus (BD-4) (mBD-4).

Musculus (BD-4) (mBD-4
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HSSP; O15263; 1E4Q.
RGD; 619944; Defb2.
InterPro; IPR001855; Defensin_beta.
InterPro; IPR006080; Defensin_mammal.
Pfam; PF00711; Defensin_beta; 1.
SMART; SM00048; DEFSN; 1.
Antibiotic; Signal.
SIGNAL 1 20
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CHAIN 22 63 Beta-defence by Similar CHAIN 31 59 By Similar BolsUlfID 38 52 By Similar BolsUlfID 38 52 By Similar BolsUlfID 42 60 By Similar SEQUENCE 63 AA; 6946 MW; 826099DE2
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FUNCTION: Has bactericidal activity (By similarity).
SUBCELLULAR LOCATION: Secreted (Potential).
TISSUE SPECIFICITY: Highly expressed in lung.
SIMILARITY: Belongs to the beta-defensin family. LAP/TAP subfamily.
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Gassterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
Ax Kanai A., Kawaji H., Kawasawa Y., Kadierski R.M., King B.L.,
Ax Konajaya A., Kawaji H., Kawasawa Y., Kadierski R.M., King B.L.,
Ax Konajaya A., Karachkin I.V., Lee Y., Lenhard B., Lyona F.A.,
Ax Maglott D. R., Maltask L., Nacchionni L., McKarzie D., Mki H.,
Ax Maglott D. R., Maltask L., Nacchionni L., McKarzie D., Mki H.,
Ax Maglott D. R., Maltask L., Nacchionni L., McKarzie D., Mki H.,
Ax Maglott D. R., Maltask L., Nacchionni L., McKarzie D., Mki H.,
Ax Maglott D. R., Maltask L., Nacchionni L., McKarzie D., Mki H.,
Ax Maglott D. R., Maltask L., Nacchionni L., McKarzie D., Shimada K.,
Ax Maltask R., Secou M., Sangisawa M., J., Shimada K.,
Ax Maltask R., Sakai D., Shimak R., Arakwa T., Finda K.,
Ax Maltask R., J., Markin K., Sakai D., Shimak K., Arakwa T., Finda S.,
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute.

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mur:

NCBI_TaxID=10090;

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SEQUENCE FROM N.A.

STRAIN=C57B1/6;

Maxwell A.;

Submitted (JUL-2003) to the EMBL/GenBank/DDBJ databases.

STRAIN=C57B1/6;

Dorin J.R.;

Submitted (JUL-2003) to the EMBL/GenBank/DDBJ databases.

REMBL; AJ578468; CAE17665.2; -.

RGO; GO:0005576; C:extracellular; IEA.

GO; GO:0005576; C:extracellular; IEA.

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"A 23.4 &b segment at the 69 degrees-70 degrees region of the Bacillu Microbiology 143:1317-1320(1997).

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SERMINE-58;

MEDLINE-9804403; PubMed=9384377; DOI=10.1038/36786;

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Name=yfmN; OrderedLocusNames=BSU07410;

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cyc02 protein precursor - Madagascar periwinkle
C;Species: Catharanthus roseus (Madagascar periwinkle)
C;Date: 12-Feb-1993 #sequence\_revision 12-Feb-1993 #text\_characteristic for the control of the control of

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09-Jul-2004

C.; Broni, S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Ch., Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E. Nature 390, 249-256, 1997

A;Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Galle iech, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holsappel, S.; Hosono, S.; Hullo, M.F. Koetter, P.; Koningstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardinois A;Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Mauee Y.; M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetell Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon A;Authors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Sero akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpstra, P.; Tognoni, A.; Tosato, V.; Uchyama T.; Winters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, A;Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A. A;Rocession: E69813
A;Accession: E69813
A;Accession: E69813
A;Coss-references: UNIPROT:006472; GB:Z99107; GB:Z99108; GB:AL009126; NID:g2633055; PI A;Esperimental source: strain 168
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C.; Bron, S.: A; Molecu A; Residu A; Cross-A; Experi C; Geneti A; Gene: 日 Š Query Best I Matche netical protein yfmN - Bacillus subtilis ies: Bacillus subtilis : 05-Dec-1997 #sequence\_revision 05-Dec-1997 #text\_change 09-Jul-2004 Local Match .; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berte S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Chh, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E., 249-256, 1997 4 ||||||| 44 LSCLPKE 50 1 10.8%; Similarity 100.0%; 7; Conservative LSCLPKE 49 Bacillus subtilis 0 Score 7; DB 2 Pred. No. 3.8 0; Mismatches DB 2; ; Length Indels , 0 Gaps •• ••

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NYALternate names neurophysin 1; pre]
NYContains: neurophysin 1; oxytocin
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CySpecies: Homo sapiens (man)
CyAccession: A94676; A91352; A94229; i
RySausville, E.; Carney, D.; Battey,
J. Biol. Chem. 260, 10236-10241, 1985
A;Title: The human vasopressin gene ii
A;Reference number: A94676; MUID:8526:
A;Molecule type: DNA
A;Residues: 1-99,101-125 <ANN-
A;Cross-references: UNIPROT:P01178; G!
R;Mohr, E.; Hillers, M.; Ivell, R.; Hi
FEBS Lett. 193, 12-16, 1985
A;Title: Expression of the vasopressin
A;Reference number: A91352; MUID:8605;
A;Cross-references: GB:X03173; NID:93;
R;Light, A.; du Vigneaud, V.
Proc. Soc. Exp. Biol. Med. 98, 692-69;
A;Title: On the nature of oxytccin and
A;Residues: 20-28 <LIG-
A;Accession: A94229
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A;Accession: A93948
A;Molecule type: protein
A;Residues: 32-125 <CHA-
R;Chluevet, M.T.; Hurpet, D.; Chauvet, Proc. Natl Acad. Sci. U.S.A. 80, 283;
A;Title: Identification of human neuron, Reference number: A93948; MUID:8322;
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probable membrane protein YDL046w - yeast (Sac N;Alternate names: hypothetical protein D2699 C;Species: Saccharomyces cerevisiae C;Date: 12-Jul-1996 #sequence_revision 12-Jul-C;Accession: S67579

R;Paulin, L.; Saren, A.M.; Laamanen, P. submitted to the Protein Sequence Database, Ju A;Reference number: S67560

A;Accession: S67579

A;Molecule type: DNA A;Residues: 1-173 <PAU> A;Cross-references: UNIPROT:Q12408; EMBL:Z7409 A;Experimental source: strain S288C C;Genetics: A;Gene: MIPS:YDL046w A;Cross-references: SGD:S0002204 A;Map position: 4L C;Superfamily: Saccharomyces cerevisiae probab C;Keywords: transmembrane #status predicted
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4-hydroxybenzoate octaprenyltransferase TC0492 [impo C;Species: Chlamydia muridarum, Chlamydia trachomati C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 # C;Accession: BB1696
R;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; H, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Nucleic Acids Res. 28, 1397-1406, 2000
A;Title: Genome sequences of Chlamydia trachomatis M A;Reference number: A81500; MUID:20150255; PMID:1068 A;Accession: BB1696
A;Status: preliminary A;Molecule type: DNA A;Residues: 1-302 <TET> A;Cross-references: UNIPROT:Q9PKH3; GB:AE002318; GB:A;Experimental source: strain Nigg (MoPn)
C;Genetics:
A;Gene: TC0492
C;Superfamily: 4-hydroxybenzoate octaprenyltransfera
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C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_rev
C;Accession: F83207
R;Stover, C.K.; Pham, X.Q.; Erwin
adman, S.; Yuan, Y.; Brody, L.L.;
.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
A;Title: Complete genome sequence
A;Reference number: A82950; MUID:
A;Accession: F83207
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-258 <STO>
A;Cross-references: UNIPROT:Q9HY9
A;Experimental source: strain PAO
C;Genetics:
A;Gene: PA3512
C;Superfamily: Synechococcus nitr
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A;Cross-references: UNII
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #tex
C;Accession: T08985
R;Bevan, M.; Murphy, G.; Ridley, P.; Hudson, S.; Bancro submitted to the Protein Sequence Database, May 1999
A;Reference number: Z16520
A;Accession: T08985
A;Molecule type: DNA
A;Residues: 1-312 <BEV>
A;Cross-references: UNIPROT:Q9SZW2; EMBL:AL078464; GSPD
A;Experimental source: cultivar Columbia; BAC clone F6G
C;Genetics:
A;Gene: ATSP:F6G3.120
A;Map position: 4
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Peng, X.; Thi~Ngoc, H.P.;
t, J.
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ansen, N.F.; Hughes, B.; Huizar, L.; Conway, A.B.; Conway, A.B.; Conway, A.B.; Conway, A.B.; Conway, A.B.; Conway, A.R.
Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, C.; Khan, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, C.; Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Ara A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Accession: F96505
A;Status: preliminary
A;Residues: 1-405 <STO>
A;Cross-references: UNIPROT:09Cfvs. C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein all4110 [imported] - Nos
C;Species: Nostoc sp. PCC 7120
A;Note: Nostoc sp. strain PCC 7120 is a synor
C;Date: 14-Dec-2001 #sequence_revision 14-Dec
C;Accession: AG2319
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kurit
Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Taka
DNA Res. 8, 205-213, 2001
A;Title: Complete Genomic Sequence of the Fil
A;Reference number: AB1807; MUID:21595285; PM
A;Accession: AG2319
A;Status: preliminary
A;Cross-references: UNIPROT:Q8YPT1; GB:BA0000
A;Experimental common
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A; Accession: D70324
A; Status: preliminary; I
A; Molecule type: DNA
A; Residues: 1-378 <AQF>
A; Cross-references: UNII
A; Experimental source: s
C; Genetics:
A; Gene: aq_267
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AG2319
hypothetical
C;Species: No
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F96505
Probable
C;Specie
C;Date:
                                                                                                                                                           C; Accession: F96505

R; Theologis, A.; Ecker, J.R.; Pai
Chin, C.W.; Chung, M.K.; Conn, I
ansen, N.F.; Hughes, B.; Huizar,
Nature 408, 816-820, 2000

Nature 408, 816-820, 2000
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C;Super
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;Species: Arabidopsis thaliana;

;Date: 02-Mar-2001 #sequence_ropace;

;Accession: F96505
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; PMID:11759840
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M.; Yamada,
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bavis, R.W.
plant Arabidopsis
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; Yasuda, I
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Maiti, R.
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Marziali,
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Tabata, S
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war, K.;
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A; Note: (C; Genetic A; Introns C; Superfa
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A; Accession: JQ1957
A; Molecule type: mRNI
A; Residues: 1-485 <SV
A; Cross-references: U
A; Experimental source
R; Jelinek, L.J.; Lok,
rnan, P.A.; Kindsvoge
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N; Alterna
C; Species
C; Date: 3
C; Accessi
R; Svoboda
Biochem.
A; Title:
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A;Molecu
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A;Map
                                                                                      R;Jelinek, L.J.; Lok, S.; Rosenberg, G.B.; Smith, R.A.; rnan, P.A.; Kindsvogel, W.
Science 259, 1614-1616, 1993
A;Title: Expression cloning and signaling properties of A;Reference number: A46211; MUID:93206096; PMID:8384375
A;Accession: A46211
A;Status: preliminary; nucleic acid sequence not shown;
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C;Super:
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E83385
                                                   A;Molecule type: mRNA
A;Residues: 1-37,'W',38-215,'W',217-323,'V',325-485
A;Experimental source: liver
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Nature 406, 959-964, 2000
A;Title: Complete genome sequence of Pseudomonas aeruginosa PA01, A;Reference number: A82950; MUID: 20437337; PMID: 10984043
                                                                                                                                                                                                                                                               A; Title: Small intr
A; Reference number:
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A; Residues: 1-427 <STO>
A; Cross-references: UNI
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rate names: GLP-1 receptor homolog, hepatic
s: Rattus norvegicus (Norway rat)
30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Ju
ion: JQ1957; A46211; S29689
la, M.; Ciccarelli, E.; Tastenoy, M.; Cauvin, A.; Stievenart,
Biophys. Res. Commun. 191, 479-486, 1993
small introns in a hepatic cDNA encoding a new glucagon-like
snce number: JQ1957; MUID:93213282; PMID:8384842
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132/3; 168/2;
lly: glucagon
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ce: strain PAO1
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Pred. No.
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hypothetical protein sll0225 - SyrC; Species: Synechocystis sp.
A; Variety: PCC 6803
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R; Kaneko, T.; Sato, S.; Kotani, H.
o, K.; Okumura, S.; Shimpo, S.; Ta
DNA Res. 3, 109-136, 1996
A; Title: Sequence analysis of the
s.
A; Reference number: S74322; MUID: SA; Accession: S74561
A; Status: nucleic acid sequence no
A; Molecule type: DNA
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Sequence 52, Appl
Sequence 72, Appl
Sequence 10, Appli
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## ALIGNMENTS

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RESULT 1
US-10-091-166B-2
Sequence 2, Application US/10091166B
Publication No. US20030143671A1
GENERAL INFORMATION:
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44D1
CURRENT APPLICATION NUMBER: US/10/091,166B
CURRENT FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR PRILING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 65
TYPE: PRT
ORGANISM: Homo sapiens
US-10-091-166B-2
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DB 14;
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                                        Length 65;
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RESULT 3
US-10-409-366-2
; Sequence 2, Application US/10409366
; Publication No. US20030166912A1
; GENERAL INFORMATION:
APPLICANT: Addler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/10/409,366
CURRENT FILING DATE: 2003-04-07
PRIOR APPLICATION NUMBER: US/09/636,399A
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR FILING DATE: 1997-10-09
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR FILING DATE: 1997-11-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: 97-44D2;
CURRENT APPLICATION NUMBER: US/10/272,121
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 2000-08-10
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR FILING DATE: 1997-11-05
PRIOR FILING DATE: 1997-9-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
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Matches 6
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TYPE: PRT
ORGANISM: F
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RESULT 4
US-10-409-532-2
; Sequence 2, Application US/10409532
; Publication No. US20030166913A1
; GENERAL INFORMATION:
    APPLICANT: Adler, David A.
    APPLICANT: Holloway, James L.
    APPLICANT: Baindur, Nand
    APPLICANT: Beigel-Orme, Stephanie
    APPLICANT: Sheppard, Paul O.
    TITLE OF INVENTION: NOVEL BETA-DEFENSINS
    FILE REFERENCE: 97-44C2
    CURRENT FILING DATE: 2003-04-07
    PRIOR APPLICATION NUMBER: US/10/409,532
    CURRENT FILING DATE: 2000-08-10
    PRIOR APPLICATION NUMBER: 60/058,339
    PRIOR APPLICATION NUMBER: 60/064,294
    PRIOR FILING DATE: 1997-11-05
    PRIOR APPLICATION NUMBER: 09/150,786
    PRIOR FILING DATE: 1998-09-10
    PRIOR APPLICATION NUMBER: 09/636,399
    PRIOR FILING DATE: 2000-08-10
    NUMBER OF SEQ ID NOS: 72
    SOFTWARE: FastSEQ for Windows Version 3.0
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SEQ ID NO 2
LENGTH: 6
TYPE: PRT
CRGANISM:
US-10-409-532
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PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 2
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TYPE: PRT
ORGANISM: Homo &
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RESULT S US-09-91

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Application US/09917340

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TITLE OF INVENTION: Transplant Medi;
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/9
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,63:
PRIOR APPLICATION NUMBER: 60/2249,602
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
SOFTWARE: Patentin Ver. 2.0
LENGTH: 67
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APPLICANT: Reid, Ted W.
APPLICANT: Reid, Ted W.
TITLE OF INVENTION: Transplant Media
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
SOFTWARE: Patentin Ver. 2.0
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ORGANISM: Homo
09-917-340-52
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LENGTH: 67
TYPE: PRT
ORGANISM: H
09-917-340-7
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US-09-872-852-2

; Sequence 2, Application US/09872852
; Patent No. US20020115602A1
; GENERAL INFORMATION:
; APPLICANT: MCCRAY JR, PAUL B.
APPLICANT: TACK, BRIAN
; APPLICANT: JIA, HONG PENG
APPLICANT: SCHUTTE, BRIAN C.
TITLE OF INVENTION: HUMAN BETA-DEFENSIN-3 (HBD-3), A
TITLE OF INVENTION: BETA-DEFENSIN ANTIMICROBIAL PEP'
FILE REFERENCE: IOWA:031US
; CURRENT APPLICATION NUMBER: US/09/872,852
; CURRENT APPLICATION NUMBER: 60/208,792
; PRIOR APPLICATION NUMBER: 60/208,792
; PRIOR FILING DATE: 2000-06-01
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 67
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FILE REFERENCE: IOWA:031US
CURRENT APPLICATION NUMBER: US/09/
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: 60/208,7
PRIOR FILING DATE: 2000-06-01
NUMBER OF SEQ ID NOS: 24
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 67
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of
OTHER INFORMATION: Peptide
US-09-872-852-2
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                                                                                       APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44D1
CURRENT APPLICATION NUMBER: US/10/091,166B
CURRENT FILING DATE: 2002-03-05
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR FILING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
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Best Local S
Matches 65
SOFTWA
SEQ ID
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TYPE:
ORGAN
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Publication No. US20030143671A1
GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
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) NO 10
TH: 67
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Similarity 100.0%;
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Pred. No. 8.5e-59;
Mismatches 0;
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APPLICANT: Baindur, Nand
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
FILE REFERENCE: 97-44D2
CURRENT APPLICATION NUMBER: US/10/272,121
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 09/636,399
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/344,097
PRIOR APPLICATION NUMBER: US 09/150,786
PRIOR APPLICATION NUMBER: US 60/064,294
PRIOR FILING DATE: 1997-09-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10
LENGTH: 67
TYPE: PRT
COCANTSM: Homo Babiens
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US-10-409-366-10; Sequence 10, Application US/; Sequence 10, Application US/; Publication No. US2003016691; GENERAL INFORMATION:
APPLICANT: Adler, David A. APPLICANT: Holloway, James APPLICANT: Baindur, Nand APPLICANT: Beigel-Orme, StAPPLICANT: Sheppard, Paul TITLE OF INVENTION: NOVEL EFILE REFERENCE: 97-44C2; CURRENT APPLICATION NUMBER: CURRENT FILING DATE: 2003-
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Publication No. US2003015763;
GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, St
APPLICANT: Sheppard, Paul
TITLE OF INVENTION: NOVEL E
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         NUMBER: US/10/409,
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US-10-409-532-10
US-10-409-532-10
US-10-409-532-10
Sequence 10, Application US/10409532
; Publication No. US20030166913A1
; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/10/409,532
CURRENT FILING DATE: 2003-04-07
PRIOR APPLICATION NUMBER: US/09/636,399A
PRIOR APPLICATION NUMBER: US/09/636,399A
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
SEQ ID NO 10
LENGTH: 67
TYPE: PRT
ORGANISM: Homo sapiens
US-10-409-532-10
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PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/054,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3
SEQ ID NO 10
LENGTH: 67
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Pred. No. 8.5e-5
); Mismatches
                                                       Score 65; DB Pred. No. 8.5e; Mismatches
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; Patent No. US20020115602A1
; GENERAL INFORMATION:
; APPLICANT: MCCRAY JR, PAUL B.
; APPLICANT: MCCRAY JR, PAUL B.
; APPLICANT: TACK, BRIAN C.
; APPLICANT: SCHUTTE, BRIAN C.
; TITLE OF INVENTION: HUMAN BETA-DEFENSIN-3 (HBD-3), A HIGHLY
TITLE OF INVENTION: BETA-DEFENSIN ANTIMICROBIAL PEPTIDE
; FILE REFERENCE: IOWA:031US
; CURRENT APPLICATION NUMBER: US/09/872,852
; CURRENT FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: 60/208,792
PRIOR PILING DATE: 2000-06-01
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: Patentin Ver. 2.1
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US-10-332-765-27
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RESULT 14
US-09-872-852-
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US-09-872-852-
                                                                                                                                                                                                                                                     APPLICANT: Conejo-Garcia, Jose-Ramon; APPLICANT: Adermann, Knut; TITLE OF INVENTION: Method for Producing an TITLE OF INVENTION: Active Proteins for Tritle Reference: 022584us; CURRENT APPLICATION NUMBER: US/10/332,765; CURRENT FILING DATE: 2003-01-13; PRIOR APPLICATION NUMBER: DE10033505.5; PRIOR FILING DATE: 2000-07-11; NUMBER OF SEQ ID NOS: 78; SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 27, Application Publication No. US20040 GENERAL INFORMATION:
APPLICANT: Forsemann, APPLICANT: Conejo-Gar
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Best Local S
Matches 43
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Best Local S
Matches 42
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Patent No
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OTHER INFORMATION: 1
OTHER INFORMATION: 1
09-872-852-4
                                                                                                                                                                                   ORGANISM: Homo
10-332-765-27
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ORGANISM: Artificial
                                                                                                                                                                                                                              LENGTH:
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Similarity 100.0%;
12; Conservative
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To. US20040116652A1
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                                                                                                                                   Score 42;
Pred. No.
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APPLICANT: SCHUTTE, BRIAN C.

APPLICANT: JIA, HONG PENG

APPLICANT: CASAVANT, THOMAS L.

TITLE OF INVENTION: HUMAN AND MOUSE b-DEFENSINS, AN

FILE REFERENCE: IOWA:041US

CURRENT APPLICATION NUMBER: US/10/252,734

CURRENT FILING DATE: 2002-09-23

PRIOR APPLICATION NUMBER: 60/323,991

PRIOR FILING DATE: 2001-09-21

NUMBER OF SEQ ID NOS: 82

SOFTWARE: Patentin Ver. 2.1
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SEQ ID NO 7
LENGTH: 35
TYPE: PRT
ORGANISM: Homo s
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Publication No. US20030176652A1
GENERAL INFORMATION:
APPLICANT: MCCRAY, JR., PAUL B.
APPLICANT: SCHUTTE, BRIAN C.
APPLICANT: JIA, HONG PENG
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Patent No. US20020115602A1
GENERAL INFORMATION:
APPLICANT: MCCRAY JR, PAUL B.
APPLICANT: TACK, BRIAN
APPLICANT: JIA, HONG PENG
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APPLICANT: JIA, HONG PENG
APPLICANT: JIA, HONG PENG
APPLICANT: SCHUTTE, BRIAN C.
TITLE OF INVENTION: HUMAN BETA-DEFENSIN-3 (HBD-3), A HIGHLY CATIONIC
TITLE OF INVENTION: BETA-DEFENSIN ANTIMICROBIAL PEPTIDE
FILE REFERENCE: IOWA:031US
CURRENT APPLICATION NUMBER: US/09/872,852
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: 60/208,792
PRIOR FILING DATE: 2000-06-01
NUMBER OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.1
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**ALIGNMENTS** 

#### RESULT US-\$ 9 Š APPLICANT: Adler, David A. APPLICANT: Holloway, James L. APPLICANT: Baindur, Nand APPLICANT: Beigel-Orme, Stephanie APPLICANT: Beigel-Orme, Stephanie APPLICANT: Sheppard, Paul O. TITLE OF INVENTION: NOVEL BETA-DEFENSINS FILE REFERENCE: 97-44C2 CURRENT APPLICATION NUMBER: US/09/636,399A CURRENT FILING DATE: 2000-08-10 PRIOR APPLICATION NUMBER: 60/058,335 PRIOR FILING DATE: 1997-10-09 PRIOR APPLICATION NUMBER: 09/150,786 PRIOR APPLICATION NUMBER: 09/150,786 PRIOR APPLICATION NUMBER: 09/636,399 PRIOR APPLICATION NUMBER: 09/636,399 PRIOR FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: 09/636,399 PRIOR FILING DATE: 2000-08-10 NUMBER OF SEQ ID NOS: 72 SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO SEQ ID N RES 4 S-09-00 Sequence Patent NC GENERAL CAPPLICA US-09-636-399A-10; Sequence 10, Application US/; Patent No. 6576755; GENERAL INFORMATION: APPLICANT: Adler, David A.; APPLICANT: Holloway, James Query Ma Best Loc Matches 1-60 TTD 2 636-399A-Local Match ce 2, Application US/09636399A No. 6576755 L INFORMATION: 61 65; **}--**4 100.0%; Similarity 100.0%; 5; Conservative ( KCCRR KCCRR 65 <u>გ</u> James US/09636399A US/09/636,399A ŗ 0 Score 65; I Pred. No. 2. Mismatches 3.0 DB 4; 1 2.9e-63; hes 0; Length 65; Indels · •

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RESULT 3
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; Sequence 52, Application No. 6696238
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APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
COFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                  APPLICANT: Reid, Ted W.
TITLE OF INVENTION: Transplant Media
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,3
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/290,932
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NUMBER OF SEQ ID NOS: 96
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GENERAL INFORMATION:
APPLICANT: Murphy, CI
APPLICANT: McAnulty
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TITLE OF INVENTION: '
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Similarity 100.0%;
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; Mismatches
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Pred. No. 3e-63;
Mismatches
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Sequence 60, ...

Sequence 60, ...

Patent No. 6576755

APPLICANT: Adler, David A.

APPLICANT: Holloway, James L.

APPLICANT: Beigel-Orme, Stephanie

APPLICANT: Sheppard, Paul O.

TITLE OF INVENTION: NOVEL BETA-DEFENSINS

FILE REFERENCE: 97-44C2

CURRENT FILING DATE: 2000-08-10

PRIOR APPLICATION NUMBER: 60/058,335

PRIOR FILING DATE: 1997-10-09

PRIOR APPLICATION NUMBER: 60/064,294

PRIOR APPLICATION NUMBER: 09/056,399

PRIOR FILING DATE: 1998-09-10

PRIOR APPLICATION NUMBER: 09/536,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR APPLICATION NUMBER: 09/636,399

PRIOR FILING DATE: 2000-08-10

NUMBER OF SEQ ID NOS: 72

"""RE: FastSEQ for Windows Version 3.0
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US-09-917-340-72
; Sequence 72, Applicat;
; Patent No. 6696238
; GENERAL INFORMATION:
; APPLICANT: Murphy, Christopher J.
APPLICANT: McAnulty, Jonathan F.
TANT: Reid, Ted W.
TRANTION: Transplant Medi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: MCANULLY,
APPLICANT: Reid, Ted W.
TITLE OF INVENTION: Transplant Media
FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,340
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/249,602
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2001-05-15
NUMBER OF SEQ ID NOS: 96
SOFTWARE: Patentin Ver. 2.0
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ORGANISM: Homo sapiens
9-917-340-72
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMÁTION: Defensin polypeptide
NAME/KEY: VARIANT
LOCATION: (33)...(33)
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ICE 72, Application US/09917340
No. 6696238
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Similarity 100.0%;
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Pred. No. 3e-63;
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GENERAL INFORMATION:

APPLICANT: Adler, David A.

APPLICANT: Holloway, James L.

APPLICANT: Baindur, Nand

APPLICANT: Beigel-Orme, Stephanie

APPLICANT: Sheppard, Paul O.

TITLE OF INVENTION: NOVEL BETA-DEFENSING

FILE REFERENCE: 97-44C2

CURRENT APPLICATION NUMBER: US/09/636, 3

PRIOR APPLICATION NUMBER: 60/058, 335

PRIOR APPLICATION NUMBER: 60/058, 335
                                                                                                              RESULT 7
US-09-636-3
; Sequence
; Patent No
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LOCATION: (34)...(34
OTHER INFORMATION: X
.09-636-399A-58
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                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Artificia
FEATURE:
OTHER INFORMATION:
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RENT APPLICATION NUMBER: US/09/6
RENT FILING DATE: 2000-08-10
COR APPLICATION NUMBER: 60/058,33
COR FILING DATE: 1997-10-09
COR APPLICATION NUMBER: 60/064,29
COR FILING DATE: 1997-11-05
COR APPLICATION NUMBER: 09/150,78
COR FILING DATE: 1998-09-10
COR APPLICATION NUMBER: 09/636,39
COR FILING DATE: 2000-08-10
MBER OF SEQ ID NOS: 72
MBER OF SEQ ID NOS: 72
                                                                                                                                                                                                                                                                                                                                                                                                                                         CANT: Beigel-Orme,
CANT: Sheppard, Pau
OF INVENTION: NOVE
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                                                                                                               No.
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NT: Adler, D
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INFORMATION:
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     6-399A-57
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SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 56

LENGTH: 38

TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Defensin polypeptide
NAME/KEY: VARIANT
LOCATION: (35)...(35)
OTHER INFORMATION: Xaa is Ile, Leu, Val, 1
OTHER INFORMATION: Xaa is Ile, Leu, Val, 1
OTHER INFORMATION: Xaa is Ile, Leu, Val, 1
                                                                                                                                                                                                                                                                                            APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFURITALE

NAME/KEY: VARIANT

LOCATION: (33)...(33)

OTHER INFORMATION: Xaa is Ile, L

3-09-636-399A-59
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ORGANISM: Artificial
FEATURE:
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R APPLICATION NUMBER: 09/150,786
R FILING DATE: 1998-09-10
R APPLICATION NUMBER: 09/636,399
R FILING DATE: 2000-08-10
ER OF SEQ ID NOS: 72
WARE: FastSEQ for Windows Version
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ce 56, Application US/09636399A
No. 6576755
L INFORMATION:
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Similarity 100.0%;
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Patent No. 6576755;
GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Beindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR FILING DATE: 1997-10-09
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.(
SEQ ID NO 54
LENGTH: 39
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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CURRENT APPLICATION NUMBER: US/09/6
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,33
PRIOR APPLICATION NUMBER: 60/064,29
PRIOR APPLICATION NUMBER: 60/064,29
PRIOR APPLICATION NUMBER: 09/150,78
PRIOR APPLICATION NUMBER: 09/636,39
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 09/636,39
PRIOR APPLICATION NUMBER: 09/636,39
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Versi
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OTHER INFORMATION: NAME/KEY: VARIANT
                         FEATURE:
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LICANT: Holloway, James I
LICANT: Baindur, Nand
LICANT: Beigel-Orme, Stel
LICANT: Sheppard, Paul O
LE OF INVENTION: NOVEL BEI
E REFERENCE: 97-44C2
RENT APPLICATION NUMBER: 1
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US
Sequence 52, Application US/09636399A

Patent No. 6576755

GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSII
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR FILING DATE: 1997-10-09
                                                                                                                                                                               RESULT :
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APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
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S-09-636-3
Sequence
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LENGTH: 39
TYPE: PRT
ORGANISM: A
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OTHER INFORMATION:
19-636-399A-54
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636-399A-52
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36-399A-5!
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Similarity 100.0%;
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US-09-636-399A-53
; Sequence 53, Application US/09636399A; Patent No. 6576755
; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399
CURRENT FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR FILING DATE: 1997-11-05
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
PRIOR FILING DATE: 2000-08-10
PRIOR FILING DATE: 2000-08-10
PRIOR FILING DATE: 2000-08-10
SEQ ID NO 53
LENGTH: 40
TYPE: DDT
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TYPE: PRT
ORGANISM: Artificial FEATURE:
OTHER INFORMATION: 1
NAME/KEY: VARIANT
LOCATION: (37)...(3)
OTHER INFORMATION: (30)
-636-399A-52
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                                                                               TYPE: PRT
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: 1
NAME/KEY: VARIANT
LOCATION: (36)...(3
OTHER INFORMATION: 1
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R FILING DATE: 1997-11-05
R APPLICATION NUMBER: 09/0
R FILING DATE: 1998-09-10
R APPLICATION NUMBER: 09/0
R FILING DATE: 2000-08-10
ER OF SEQ ID NOS: 72
WARE: FastSEQ for Windows
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RESULT

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Sequence 51, Application US/09636399A; Sequence 51, Application US/09636399A; Patent No. 6576755; GENERAL INFORMATION:
APPLICANT: Adler, David A.
APPLICANT: Holloway, James L.
APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
FITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT APPLICATION NUMBER: US/09/636,399A
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR APPLICATION NUMBER: 60/064,294
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 09/636,399
PRIOR FILING DATE: 2000-08-10
SEQ ID NO 51
LENGTH: 41
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Defensin polypeptide
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APPLICANT: Baindur, Nand
APPLICANT: Beigel-Orme, Stephanie
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: NOVEL BETA-DEFENSINS
FILE REFERENCE: 97-44C2
CURRENT FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: 60/058,335
PRIOR FILING DATE: 1997-10-09
PRIOR FILING DATE: 1997-10-09
PRIOR FILING DATE: 1997-11-05
PRIOR FILING DATE: 1997-11-05
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 09/150,786
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 1998-09-10
PRIOR FILING DATE: 2000-08-10
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 50
LENGTH: 41
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Defensin polypeptide
NAME/KEY: VARIANT
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US-09-636-399A-50
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ALIGNMENTS

### RESULT 1. AAY07243 ID AAYC XX AAY77243 ID AAYC XX AAY77243 ID AAYC XX AAYC XX AAYC XX Beta XXX Huma KW Huma CX Homo XX Human; zampl; beta-defensin; bacterium; fungus; virus; inflammation; tissue damage; immune response; AIDS; chemotherapy; melanocortin; antibody; ion flux; cytocidal activity; mammalian cell. Homo sapiens -MAR-1999. a-defensin JUL-1999 913080-A1. 07243; 07243 SEP-1998; standard; (first family member 98WO-US019222. protein; entry) <u>ი</u> zamp1. A.

-SEP-1997; -NOV-1997; -NOV-1997; 97US-0058335P. 97US-00926529. 97US-0064294P. 97US-00964687.

OW. \_ ZYMOGENETICS INC

Adler 'n Holloway JL, Baindur Z Beigel

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WPI; 1999-215064/18. N-PSDB; AAX29985.

New za as dia AIDS. r zampl polypeptide and polynucleotide, human beta-defensins - diagnostic reagents and for treatment of microbial infections, useful , and

aim Page 70; 79pp; English.

This sequence represents the human zampl protein which is a member of the beta-defensin protein family. Zampl protein is useful as a pharmaceutical composition, useful for treatment of e.g. bacterial, fungal and viral infections. They are also useful pro-inflammators, for treating chronic tissue damage, and for stimulating the immune response, for treatment of AIDS or chemotherapy patients. Zampl polypeptides and antibodies are useful for studying activity of the melanocortin family, studying ion flux in cell culture, and studying cytocidal activity against mammalian

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                                                                                                                                         his invention describes the novel active, mature human proteins and SAP-3 which have antibiotic, antibacterial, antifungal and intiviral activity. (I), and their precursors, are useful for trepreventing microbial infections (caused by bacteria, fungi or viround dressings, and to produce specific antibodies (Ab) are inclessing them) are inclessing them are used as diagnostic reagents, e.g. to detect a represents the human SAP-3 protein described in the method of the invention
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JUN-2002

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surface

antimicrobial peptide; pore
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forming agent;
kidney transplant;

cardioplegia;

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The invention describes new transplant compositions comprising antimicrobial polypeptides or pore forming agents and/or cell surface receptor binding compounds. The media is capable of extending the greservation period past 72 hours and can provide organs with increased functionality upon transplant. animals receiving kidneys stored in the media of the present invention for either three or four days had serum creatinine levels of less than half of those observed in control animals receiving kidneys stored in UW solution (defined in the specification) alone. Lower serum creatinine levels are indicative of healthier kidneys and a more preferable prognosis for the transplant patient. The media of the invention are useful for decreasing the incidence and/or severity of delayed graft function in patients receiving transplanted kidneys stored and/or treated in the media. The media may also be used in procedures such as cardioplegia. It is contemplated that transplant of healthier or an antimicrobial defensin peptide studied in the development of the transplant media.
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                   This invention describes the novel active, mature human proteins (I) SAP-2 and SAP-3 which have antibiotic, antibacterial, antifungal and antiviral activity. (I), and their precursors, are useful for treating or preventing microbial infections (caused by bacteria, fungi or viruses), particularly where they (or human cells expressing them) are included in wound dressings, and to produce specific antibodies (Ab) or their fragments. Ab are used as diagnostic reagents, e.g. to detect a deficiency of (I) or the presence of a (I) variant. This sequence represents the mature human SAP-3 protein described in the method of the invention
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                                                                                                                                                                                                                                                                                                             The present invention relates to human beta-defensin-3 (hBD-3) and its derivatives. The peptide, its coding sequence and vectors containing the coding sequence are useful in (gene) therapy and diagnosis, especially for preventing or treating a wide range of microbial infections (particularly Burkholderia cepacia and Pseudomonas aeruginosa in the respiratory tract, especially in cases of cystic fibrosis, and Helicobacter pylori, also inflammatory diseases of the gastrointestinal and urogenital tracts, sepsis and yeast infections), and for inducing apoptosis for treating malignant melanoma and tumours. The present sequence is a derivative of human BD-3
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